

Application No. 10/537003
Response to Office Action dated 07/09/2007

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-41. (Cancelled)

42. (New) An analyzing device comprising:

a detecting mechanism for detecting whether or not a test tool exists in a placement area, the detecting mechanism including a detection light-emitting unit for emitting light onto the test tool and a detection light-receiving unit for receiving reflection light from the test tool;

a conveying mechanism for transferring the test tool from the placement area to a light-measuring area which is different from the placement area;

a light-measuring mechanism including a measurement light-emitting unit for emitting light onto the test tool transferred to the light-measuring area, and a measurement light-receiving unit for receiving reflection light from the test tool; and

wherein a light emission axis of the detection light-emitting unit and a light reception axis of the detection light-receiving unit are parallel or substantially parallel to each other.

43. (New) The analyzing device according to claim 42, wherein a light emission axis of the measurement light-emitting unit and a light reception axis of the measurement light-receiving unit are parallel or substantially parallel to each other.

44. (New) The analyzing device according to claim 43, further comprising a measurement light guide for defining a path of at least one of light traveling toward the test tool from the measurement light-emitting unit and light traveling toward the measurement light-receiving unit from the test tool.

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45. (New) The analyzing device according to claim 44,

wherein the measurement light guide comprises: a first entrance area for introducing light emitted from the measurement light-emitting unit into the measurement light guide; a first output area for outputting the light introduced into the measurement light guide toward the test tool; a second entrance area for introducing reflection light from the test tool into the measurement light guide; and a second output area for outputting the light reflected by the test tool and then introduced into the light guide toward the measurement light-receiving unit; and

wherein at least one of the first entrance area, the first output areas, the second entrance area and the second output area refracts light passing therethrough.

46. (New) The analyzing device according to claim 44, wherein the measurement light guide comprises a prism or a lens.

47. (New) The analyzing device according to claim 45, wherein the first output area and the second entrance area are constituted as planar surfaces that are orthogonal or substantially orthogonal to the light emission axis of the measurement light-emitting unit.

48. (New) The analyzing device according to claim 44, wherein the measurement light guide comprises a core portion extending along the light emission axis of the measurement light emitting unit, and an outer shell portion having a lower refractive index than the core portion and surrounding the core portion.

49. (New) The analyzing device according to claim 48, wherein the outer shell portion functions as a cladding layer, and

wherein the measurement light guide as a whole constitutes an optical fiber.

50. (New) The analyzing device according to claim 44, wherein the measurement light guide comprises an optical fiber portion extending along the light emission axis of the

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measurement light-emitting unit, and an outer shell portion surrounding the optical fiber portion.

51. (New) The analyzing device according to claim 44, further comprising a light shield for causing light reflected by the test tool at a target angle to enter the measurement light-receiving unit selectively.

52. (New) The analyzing device according to claim 51, wherein the target angle is 45 degrees or substantially 45 degrees.

53. (New) The analyzing device according to claim 51, wherein the light shield is formed with an opening for selectively exposing the first output area and the second entrance area.

54. (New) The analyzing device according to claim 51, wherein the light shield comprises an annular part surrounding a periphery of at least one of the first output area and the second entrance area.

55. (New) The analyzing device according to claim 43, wherein there is provided only a single measurement light-emitting unit, whereas there are provided a plurality of measurement light-receiving units, and

wherein the plurality of measurement light-receiving units are arranged to surround the single measurement light-emitting unit.

56. (New) The analyzing device according to claim 43, wherein there is provided a plurality of measurement light-emitting units, whereas there is provided only a measurement single light-receiving unit, and

wherein the plurality of measurement light-emitting units are arranged to surround the single light-receiving unit.

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57. (New) The analyzing device according to claim 56, wherein the plurality of light-emitting units emit light of different peak wavelengths.
58. (New) The analyzing device according to claim 43, wherein the measurement light-receiving unit is designed to receive scattered light reflected by the test tool.
59. (New) The analyzing device according to claim 43, further comprising a wavelength selection portion for causing light reflected by the test tool to enter the measurement light-receiving unit after wavelength selection.
60. (New) The analyzing device according to claim 43, further comprising a wavelength selection portion for outputting light emitted from the measurement light-emitting unit toward the test tool after wavelength selection.
61. (New) The analyzing device according to claim 42, further comprising a detection light guide for defining a path of at least one of light traveling toward the test tool from the detection light-emitting unit and light traveling toward the detection light-receiving unit from the test tool.
62. (New) The analyzing device according to claim 61, wherein the detection light guide comprises: a first entrance area for introducing light emitted from the detection light-emitting unit into the detection light guide; a first output area for outputting the light introduced into the detection light guide toward the test tool; a second entrance area for introducing reflection light from the test tool into the detection light guide; and a second output area for outputting the light reflected by the test tool and then introduced into the light guide toward the detection light-receiving unit;
wherein at least one of the first entrance area, the first output area, the second entrance area, and the second output area is arranged to refract light passing therethrough.
63. (New) The analyzing device according to claim 61, wherein the detection light guide comprises a prism or a lens.

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64. (New) The analyzing device according to claim 61, wherein the detection light guide comprises a cylindrical lens or a Fresnel lens.

65. (New) The analyzing device according to claim 61, wherein the detection light guide comprises: a lens having an irregular surface; and a cover that covers the irregular surface and makes an upper surface of the light guide flat.

66. (New) The analyzing device according to claim 65, wherein the detection light guide comprises a Fresnel lens.

67. (New) The analyzing device according to claim 61, wherein the detection light-emitting unit comprises a light-emitting diode.

68. (New) The analyzing device according to claim 46, wherein the prism or lens serving as the measurement light guide is formed with recesses for fixedly fitting the detection light-emitting unit and the measurement light-receiving unit, respectively, the prism or lens being further formed with a slit for preventing light from directly entering from the measurement light-emitting unit into the measurement light-receiving unit.

69. (New) The analyzing device according to claim 63, wherein the prism or lens serving as the detection light guide is formed with recesses for fixedly fitting the detection light-emitting unit and the detection light-receiving unit, respectively, the prism or lens being further formed with a slit for preventing light from directly entering from the detection light-emitting unit into the detection light-receiving unit.

70. (New) The analyzing device according to claim 42, wherein the test tool is elongate in one direction, the conveying mechanism transferring the test tool from the placement area to the light-measuring area transversely to said one direction, the light-measuring mechanism being also movable along the test tool in said one direction.